

WHAT IS CLAIMED IS:

1. A toner for developing electrostatic latent images, having:

a volume-average particle size of 3 to 7 μm ,
an average degree of roundness of 0.960 to 0.995,
a standard deviation of the degree of roundness of not more than 0.04, and

surface properties D/d_{50} that satisfy the following conditional expression,

wherein 0.001 to 0.1 % by weight of fatty acid metal salt that has a volume-average particle size of 1.5 to 12 μm is externally added;

$$D/d_{50} \geq 0.40$$

in which $D = 6/(\rho \cdot S)$, (ρ is a true density (g/cm^3) of toner particles, S is a BET specific surface area (m^2/g) of toner particles), and d_{50} represents a weight-average particle size (μm) of the toner particles.

2. The toner of Claim 1, wherein the fatty-acid metal salt is calcium stearate.

3. The toner of Claim 1, which is applied to an image-forming method in which residual toner on an electrostatic latent image supporting member is cleaned by using a cleaning blade.

4. The toner of Claim 3, wherein the cleaning blade is placed with a press-contact angle of 10 to 20° and a press-contact force of 20 to 50 N/m with respect to the electrostatic latent image supporting member.

5. The toner of Claim 3, wherein the image-forming method is characterized in that an amount of the toner that is transported by a toner-supporting member is regulated by a regulating member that is placed in contact with the surface of the toner supporting member and the regulated toner is transported to a developing area to develop electrostatic latent images.

6. The toner of Claim 1, comprising a binder resin having:

a glass transition temperature of 50 to 75°C,
a softening point of 80 to 160°C,
a number-average molecular weight of 1,000 to 30,000
and

a ratio of weight-average molecular weight/number-average molecular weight of 2 to 100.

7. The toner of Claim 1, comprising a binder resin having:

a glass transition temperature of 50 to 75°C,
a softening point of 80 to 120°C,
a number-average molecular weight of 2,500 to 30,000
and

a ratio of weight-average molecular weight/number-average molecular weight of 2 to 20.

8. The toner of Claim 1, wherein the toner is prepared by a wet method and subjected to a heat treatment to have a globular shape.

9. The toner of Claim 8, wherein the heat treatment is an instantaneous heat treatment by applying heat to

toner particles in hot air flow.

10. The toner of Claim 1, wherein the toner is prepared by a wet method.

11. The toner of Claim 1, wherein the toner is a non-magnetic toner.

12. An image-forming method, in which an electrostatic latent image formed on the surface of an electrostatic latent image supporting member is developed by a toner to form an image; and after the image has been transferred onto a transferring member, the residual toner on the electrostatic latent image supporting member is cleaned by using a cleaning blade, being characterized in that:

the toner has a volume-average particle size of 3 to 7 μm , an average degree of roundness of 0.960 to 0.995,

a standard deviation of the degree of roundness of not more than 0.04, and surface properties D/d_{50} that satisfy the following conditional expression;

and that 0.001 to 0.1 % by weight of fatty acid metal salt that has a volume-average particle size of 1.5. to 12 μm is externally added:

$$D/d_{50} \geq 0.40$$

in which $D = 6/(\rho \cdot S)$ (ρ is a true density (g/cm^3) of toner particles, S is a BET specific surface area (m^2/g) of toner particles), and d_{50} represents a weight-average particle size (μm) of the toner particles.

13. The method of Claim 12, wherein the fatty-acid metal salt is calcium stearate.

14. The method of Claim 12, wherein the cleaning blade is placed with a press-contact angle of 10 to 20° and a press-contact force of 20 to 50 N/m with respect to the electrostatic latent image supporting member.

15. The method of Claim 12, wherein an amount of the toner that is transported by a toner-supporting member is regulated by a regulating member that is placed in contact with the surface of the toner supporting member and the regulated toner is transported to a developing area to develop electrostatic latent images.

16. The method of Claim 12, wherein the toner comprises a binder resin having:

a glass transition temperature of 50 to 75°C,
a softening point of 80 to 160°C,
a number-average molecular weight of 1,000 to 30,000
and

a ratio of weight-average molecular weight/number-average molecular weight of 2 to 100.

17. The method of Claim 12, wherein the toner comprises a binder resin having:

a glass transition temperature of 50 to 75°C,
a softening point of 80 to 120°C,
a number-average molecular weight of 2,500 to 30,000
and

a ratio of weight-average molecular weight/number-average molecular weight of 2 to 20.

18. The method of Claim 12, wherein the toner is prepared by a wet method and subjected to a heat

treatment to have a globular shape.

19. The method of Claim 18, wherein the heat treatment is an instantaneous heat treatment by applying heat to toner particles in hot air flow.

20. The method of Claim 12, wherein the toner is a non-magnetic toner.